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| Mr. Michael T. Davis  Algebra II Delta & Eta | | Introduction to Percentages  March 17, 2015 | |
| Name: | |

**Examples of Converting percents to reduced fractions and decimals:**

1. What does 50% mean:  or 
2. What does 20% mean:  or 
3. What does 75% mean:  or 
4. What does 100% mean: 

**Try:**

1. What does 40% mean:  or 
2. What does 25% mean:  or 
3. What does 20% mean:  or 
4. What does 200% mean: 

**Examples of Finding the Percent of a Number:**

1. 10% of 85 is 
2. 35% of 60 is 
3. 70% of 120 is 
4. 9% of 110 is 

**Try:**

1. 20% of 45 is 
2. 45% of 160 is 
3. 80% of 40 is 
4. 7% of 300 is 

**Examples of Finding a New Quantity Based on a Present Increase:**

1. The price of a $20 shirt increases by 10%. What is the new price?

Find 10% of $20, then add this $ increase to the $20

 or $22

Or  or $22

1. The price of a $30 shirt increases by 8%. What is the new price?

Find 8% of $30, then add this $ increase to the $30.

 or $32.4

Or  or $32.4

**Try:**

1. The price of a $40 shirt increases by 15%. What is the new price?
2. The price of a $68 shirt increases by 12%. What is the new price?

**Examples of Finding a New Quantity Based on a Present Decrease:**

1. The price of a $40 shirt decreases by 10%. What is the new price?

Find 10% of $40, then subtract this $ decrease from the $40

 or $36

Or  or $36

1. The price of a $55 shirt decreases by 16%. What is the new price?

Find 16% of $55, then subtract this $ decrease from the $55.

 or $46.2

Or  or $46.2

**Try:**

1. The price of an $18 shirt decreases by 25%. What is the new price?
2. The price of a $76 shirt decreases by 30%. What is the new price?

**Percent Practice Problems**

1. Find 47% of 280
2. Find 9% of 3200
3. Find 385% of 82
4. Find 7.3% of 2530
5. At a restaurant, you are supposed to leave a tip that is at least 15% of the bill. You went out to eat with your friends before prom, and the bill was $80 without the tip. What is the total amount you paid, including the tip?
6. Your beautiful new car *was* worth $25,000, until the side was dented. Then, it lost 9% of its original value. How much is the car worth after the dent?
7. You invested $8,000 in your savings account. A few years later, the amount has grown to $9,700. By what percent does your savings increase?
8. Alice drank from a strange bottle, and shrank from her normal height of 50 inches to 12 inches. What percent did her height decrease by?